

5/ro

ENTERED
see page 6



OIPE

RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/10/032,214

TIME: 17:10:41

Input Set : D:\216730us.app

Output Set: N:\CRF3\05232002\J032214.raw

```

3 <110> APPLICANT: PUNNONEN, JUHA
4     LAZETIC, ALEXANDRA
5     LEONG, STEVEN R.
6     CHANG, CHIA-CHUN
7     APT, DORIS
8     GUSTAFSSON, CLAES
10 <120> TITLE OF INVENTION: NOVEL CO-STIMULATORY MOLECULES
12 <130> FILE REFERENCE: 02-106730US
14 <140> CURRENT APPLICATION NUMBER: 10/032,214
C--> 15 <141> CURRENT FILING DATE: 2002-12-20
17 <150> PRIOR APPLICATION NUMBER: 09/888,324
18 <151> PRIOR FILING DATE: 2001-06-22
20 <150> PRIOR APPLICATION NUMBER: PCT/US01/19973
21 <151> PRIOR FILING DATE: 2001-06-22
23 <150> PRIOR APPLICATION NUMBER: 60/213,946
24 <151> PRIOR FILING DATE: 2000-06-23
26 <150> PRIOR APPLICATION NUMBER: 60/241,245
27 <151> PRIOR FILING DATE: 2000-10-17
29 <160> NUMBER OF SEQ ID NOS: 320
31 <170> SOFTWARE: PatentIn Ver. 2.1
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 891
35 <212> TYPE: DNA
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
40     nucleotide sequence
42 <400> SEQUENCE: 1
43 atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
44 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
45 accaaaagag tgaaagaaac agtaatgcta tctgtgatt acaacacatc cactgaagaa 180
46 ctgacaagcc ttcggtacta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
47 ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcactgacat gaacgataac 300
48 ccccgatttg tgatcctggc tctgogcctg tcggacagtg gcacctacac ctgtgttatt 360
49 cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttcctg gaggttaatg 420
50 atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
51 agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttgga 540
52 aatggagaag aattaaatgc taccaacaca aactgtccc aagatcctga aaccaagctc 600
53 tacatgatta gcagtgaact ggatttcaac atgacaagca atcacagctt cttgtgtctt 660
54 gtcaagtatg gagacttaac agtgtcacag accttctact ggcaagaatc caaaccaacc 720
55 ccttctgcta atcagcacct gacctggacc attattatcc cagtctcagc atttgggatt 780
56 tctgtgatca ttgcagttat actaacatgc ctgacctgca gaaatgctgc aatacgcaga 840
57 cagagaaggg agaatgaagt ggaaatgcaa agttgctctc agtctccatg a 891

```

RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/10/032,214

TIME: 17:10:41

Input Set : D:\216730us.app

Output Set: N:\CRF3\05232002\J032214.raw

```

60 <210> SEQ ID NO: 2
61 <211> LENGTH: 900
62 <212> TYPE: DNA
63 <213> ORGANISM: Artificial Sequence
64 <220> FEATURE:
65 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
66     nucleotide sequence
67 <400> SEQUENCE: 2
70 atggggccaca cgctgaggcc gggaactcca ctgcccaggt gtctacacct caagctctgc 60
71 ctgctcctgg cgctggcggg tctccacttc tcttcaggta tcagccaggt caccaagtcg 120
72 gtgaaagaaa tggcagcact gtctgtgat tacaacattt ctatcgatga actggcgaga 180
73 atgcgcataat actggcagaa ggaccaacag atggtgctga gcatcatctc tgggcaagtg 240
74 gaagtgtggc ctgagtacaa gaaccgcacc ttccccgaca tcattaacaa cctctccctt 300
75 atgacctcgg cactgcgcct gtcggacaag ggcacctaca cctgcgtggt tcagaagaat 360
76 gagaacgggt ctttcagacg ggagcacctg acctccgtga cactgtccat cagagctgac 420
77 tcccctgtcc ctagcataac tgacattgga catcccggcc ctaatgtgaa aaggataaga 480
78 tgctccgcct ctggaggttt tccagagcct cgctcgcct ggatggaaga tggagaagaa 540
79 ctaaacgccg tcaacacgac ggttgaccag gatttggaac cggagctcta cagcgtcagc 600
80 agtgaactgg atttcaatgt gacaaataac cacagcatcg tgtgtctcat caaatacggg 660
81 gagctgtcgg tgtcacagat cttcccttgg agcaaacca agcaggagcc tcccattgat 720
82 cagcttccat tctgggtcat tatcccagta agtgggtgct tgggtgctcac tgcggtagtt 780
83 ctctactgcc tggcctgcag acatgttgcg aggtggaaaa gaacaagaag gaatgaagag 840
84 acagtgggaa ctgaaaggct gtcccctatc tacttaggct ctgcgcaatc ctcgggctga 900
87 <210> SEQ ID NO: 3
88 <211> LENGTH: 900
89 <212> TYPE: DNA
90 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
92 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
93     nucleotide sequence
94 <400> SEQUENCE: 3
97 atggggccaca cgctgaggcc gggaactcca ctgcccaggt gtctacacct caagctctgc 60
98 ctgctcctgg cgctggcggg tctccacttc tcttcaggta tcagccaggt caccaagtcg 120
99 gtgaaagaaa tggcagcact gtctgtgat tacaacattt ctatcgatga actggcgaga 180
100 atgcgcataat actggcagaa ggaccaacag atggtgctga gcatcatctc tgggcaagtg 240
101 gaagtgtggc ctgagtacaa aaaccgcacc ttccccgaca tcattaacaa cctctccctt 300
102 atgacctcgg cactgcgcct gtcggacaag ggcacctaca cctgcgtggt tcagaagaat 360
103 gagaacgggt ctttcagacg ggagcacctg acctccgtga cactgtccat cagagctgac 420
104 tcccctgtcc ctagcataac tgacattgga catcccggcc ctaatgtgaa aaggataaga 480
105 tgctccgcct ctggagattt tccagagcct cgctcgcct ggatggaaga tggagaagaa 540
106 ctaaacgccg tcaacacgac ggttgaccag gatttggaac cggagctcta cagcgtcagc 600
107 agtgaactgg atttcaatgt gacaaataac cacagcatcg tgtgtctcat caaatacggg 660
108 gagctgtcgg tgtcacagat cttcccttgg agcaaacca agcaggagcc tcccattgat 720
109 cagcttccat tctgggtcat tatcccagta agtgggtgct tgggtgctcac tgcggtagtt 780
110 ctctactgcc tggcctgcag acatgttgcg aggtggaaaa gaacaagaag gaatgaagag 840
111 acagtgggaa ctgaaaggct gtcccctatc tacttaggct ctgcgcaatc ctcgggctga 900
114 <210> SEQ ID NO: 4
115 <211> LENGTH: 912
116 <212> TYPE: DNA

```

RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/10/032,214

TIME: 17:10:41

Input Set : D:\216730us.app

Output Set: N:\CRF3\05232002\J032214.raw

```

117 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
121     nucleotide sequence
123 <400> SEQUENCE: 4
124 atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
125 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
126 accaaaagag tgaaagaaac agtaatgcta tctgtgatt acagcacatc cactgaagaa 180
127 ctgacaagcc ttcggtacta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
128 ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
129 ccccgatttg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
130 cagaagcctg atttgaaagg ggcttataaa ctggagcacc tgacttccgt gagggttaatg 420
131 atcagagctg acttccctgt cctaccata aatgatcttg gaaatccatc tctaataatc 480
132 agaaggctaa tttgctcaac ctctggaggt ttccaaggc cccacctcta ctggttgga 540
133 aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
134 tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
135 atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
136 cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttggtgctc 780
137 actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
138 aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
139 tctcgggct ga                                     912
142 <210> SEQ ID NO: 5
143 <211> LENGTH: 912
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
149     nucleotide sequence
151 <400> SEQUENCE: 5
152 atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
153 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
154 accaaaagag tgaaagaaac agtaatgcta tctgtgatt acagcacatc cactgaagaa 180
155 ctgacaagcc ttcggtacta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
156 ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctactgacat gaacgataac 300
157 ccccgatttg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
158 cagaagcctg ttttgaagg ggcttataaa ctggagcacc tggcttccgt gagggttaatg 420
159 atcagagctg acttccctgt cctaccata aatgatcttg gaaatccatc tctaataatc 480
160 agaaggctaa tttgctcaac ctctggaggt ttccaaggc cccacctcta ctggttgga 540
161 aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
162 tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
163 atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
164 cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtc tttggtgctc 780
165 actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
166 aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctccgcgcaa 900
167 tctcgggct ga                                     912
170 <210> SEQ ID NO: 6
171 <211> LENGTH: 912
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence

```

RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/10/032,214

TIME: 17:10:41

Input Set : D:\216730us.app

Output Set: N:\CRF3\05232002\J032214.raw

175 <220> FEATURE:

176 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
177 nucleotide sequence

179 <400> SEQUENCE: 6

```

180 atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
181 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
182 accaaaagag tgaaagaaac agtaatgcta tctgtgatt acagcacatc cactgaagaa 180
183 ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
184 ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctgtgacat gaacgataac 300
185 ccccgatttg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
186 cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
187 atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
188 agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
189 aatggagaag aattaaatgc taccaacaca acactgtccc aagatcctga aaccaagctc 600
190 tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
191 atcaaatatc gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
192 cccccatttg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
193 actgcggtag ttctctaccg cccggcctgc agacatgttg cgaggtggaa aagaacaaga 840
194 aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
195 tcctcgggct ga 912

```

198 <210> SEQ ID NO: 7

199 <211> LENGTH: 912

200 <212> TYPE: DNA

201 <213> ORGANISM: Artificial Sequence

203 <220> FEATURE:

204 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
205 nucleotide sequence

207 <400> SEQUENCE: 7

```

208 atgggtcaca caatgaagtg gggatcacta ccacccaagc gcccatgcct ctggctctct 60
209 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
210 accaaaagag tgaaagaaac agtaatgcta tctgtgatt acaacacatc cactgaagaa 180
211 ctgacaagcc ttcggatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
212 ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tctgtgacat gaacgataac 300
213 ccccgatttg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
214 cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
215 atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
216 agaaggctaa tttgctcaac ctctggaggt tttccaaggc cccacctcta ctggttggaa 540
217 aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
218 tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
219 atcaaatatc gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
220 cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
221 actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
222 aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
223 tcctcgggct ga 912

```

226 <210> SEQ ID NO: 8

227 <211> LENGTH: 912

228 <212> TYPE: DNA

229 <213> ORGANISM: Artificial Sequence

231 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/10/032,214

TIME: 17:10:42

Input Set : D:\216730us.app

Output Set: N:\CRF3\05232002\J032214.raw

```

232 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
233     nucleotide sequence
235 <400> SEQUENCE: 8
236 atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
237 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
238 accaaaagag tgaagaaac agtaatgcta tctgtgatt acaacacatc cactgaagaa 180
239 ctgacaagcc ttcgatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
240 ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
241 ccccgatttg tgatcctggc tctgcgcctg tcggacagtg gcacctacac ctgtgttatt 360
242 cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tggcttccgt gaggttaatg 420
243 atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
244 agaaggctaa tttgtcaaac ctctggaggt ttccaaggc cccacctctg ctggttgga 540
245 aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
246 tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
247 atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
248 cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
249 actgcggtag ttctctactg cctggcctgc agacatgttg cgaggtggaa aagaacaaga 840
250 aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
251 tcctcgggct ga 912
254 <210> SEQ ID NO: 9
255 <211> LENGTH: 912
256 <212> TYPE: DNA
257 <213> ORGANISM: Artificial Sequence
259 <220> FEATURE:
260 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
261     nucleotide sequence
263 <400> SEQUENCE: 9
264 atgggtcaca caatgaagtg gggatcacta ccaccaagc gcccatgcct ctggctctct 60
265 cagctcttgg tgctcactgg tcttttttac ttctgttcag gcatcacccc aaagagtgtg 120
266 accaaaagag tgaagaaac agtaatgcta tctgtgatt acagcacatc cactgaagaa 180
267 ctgacaagcc ttcgatcta ttggcaaaag gatagtaaaa tgggtgctggc catcctgcct 240
268 ggaaaagtgc aggtgtggcc tgagtacaag aaccgcacca tcaactgacat gaacgataac 300
269 ccccgatttg tgatcctggc tctgcgcctg tcggacaagg gcacctacac ctgctgggtt 360
270 cagaagcctg ttttgaaagg ggcttataaa ctggagcacc tgacttccgt gaggttaatg 420
271 atcagagctg acttccctgt ccctaccata aatgatcttg gaaatccatc tcctaataatc 480
272 agaaggctaa tttgtcaaac ctctggaggt ttccaaggc cccacctcta ctggttgga 540
273 aatggagaag aattaaatgc taccaacaca acagtttccc aagatcctgg aactgagctc 600
274 tacatgatta gcagtgaact ggatttcaat gtgacaaata accacagcat cgtgtgtctc 660
275 atcaaatacg gggagctgtc ggtgtcacag atcttccctt ggagcaaacc caagcaggag 720
276 cctcccattg atcagcttcc attctgggtc attatcccag taagtgggtg tttggtgctc 780
277 actgcggtag ttctctactg cctggcctgc aggcattgtg cgaggtggaa aagaacaaga 840
278 aggaatgaag agacagtggg aactgaaagg ctgtccccta tctacttagg ctctgcgcaa 900
279 tcctcgggct ga 912
282 <210> SEQ ID NO: 10
283 <211> LENGTH: 912
284 <212> TYPE: DNA
285 <213> ORGANISM: Artificial Sequence
287 <220> FEATURE:
288 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/032,214

DATE: 05/23/2002
TIME: 17:10:43

Input Set : D:\216730us.app
Output Set: N:\CRF3\05232002\J032214.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:95; N Pos. 223
Seq#:97; N Pos. 929
Seq#:111; N Pos. 827
Seq#:153; N Pos. 893,894
Seq#:157; N Pos. 599
Seq#:174; Xaa Pos. 75
Seq#:176; Xaa Pos. 310
Seq#:190; Xaa Pos. 276
Seq#:232; Xaa Pos. 298
Seq#:236; Xaa Pos. 200
Seq#:284; Xaa Pos. 6,8,14,18,19,20,27,55,60,69,101,106,110,113,120,124,135
Seq#:284; Xaa Pos. 149,150,151,167,168,169,177,192,197,199,208,215,218,227
Seq#:284; Xaa Pos. 249,261,263,267,268,273
Seq#:287; Xaa Pos. 12,25,29,40,122,129,164,196,219,241
Seq#:290; Xaa Pos. 50,55,56,113,120,123,124,125,126,128,129,130,131,135,138
Seq#:290; Xaa Pos. 140,170,193,194,195,209,211,252,253
Seq#:292; Xaa Pos. 9,35,55,110,124,135,183,192,211,215,216,217,231,288,290

VERIFICATION SUMMARY

DATE: 05/23/2002

PATENT APPLICATION: US/10/032,214

TIME: 17:10:43

Input Set : D:\216730us.app

Output Set: N:\CRF3\05232002\J032214.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:4459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:180
L:4532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:97 after pos.:900
L:4923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111 after pos.:780
L:6089 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:153 after pos.:840
L:6198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:157 after pos.:540
L:6665 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174 after pos.:64
L:6851 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:176 after pos.:304
L:7802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:190 after pos.:272
L:10636 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:232 after pos.:288
L:10886 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:236 after pos.:192
L:13590 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:0
L:13593 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:16
L:13599 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:48
L:13602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:64
L:13608 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:96
L:13611 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:112
L:13614 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:128
L:13617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:144
L:13620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:160
L:13623 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:176
L:13626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:192
L:13629 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:208
L:13632 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:224
L:13635 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:240
L:13638 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:256
L:13641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:284 after pos.:272
L:13841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:0
L:13844 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:16
L:13847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:32
L:13862 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:112
L:13865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:128
L:13871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:160
L:13877 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:192
L:13880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:208
L:13886 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:240
L:14165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:48
L:14177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:112
L:14180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:128
L:14186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:160
L:14192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:192
L:14195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:208
L:14201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:240
L:14361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:292 after pos.:0
L:14367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:292 after pos.:32
L:14370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:292 after pos.:48
L:14379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:292 after pos.:96
L:14382 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:292 after pos.:112

VERIFICATION SUMMARY

DATE: 05/23/2002

PATENT APPLICATION: US/10/032,214

TIME: 17:10:43

Input Set : D:\216730us.app

Output Set: N:\CRF3\05232002\J032214.raw

L:14385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:292 after pos.:128
L:14394 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:292 after pos.:176
L:14400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:292 after pos.:208